

AMENDMENTS TO THE DRAWINGS:

The attached replacement drawing sheet makes changes to Fig. 1 and replaces the original sheet. Element 24 has been relabeled to be element 32.

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the previous amendments and the following remarks.

Claims 1-12 are pending. By this Amendment, the specification, Fig. 1 and claims 1, 2 and 11 are amended.

The Office Action objects to the drawings. Fig. 1 is amended to change element 24 to element 32.

The Office Action objects to the specification. The specification is amended to address the Examiner's concerns.

The Office Action rejects claims 1-3, 6, 8-11 and 12 under 35 U.S.C. § 102(b) over U.S. Patent No. 4,519,335 to Krautkremer et al.; and rejects claims 1, 4 and 7 under 35 U.S.C. § 103(a) over U.S. Patent No. 5,795,199 to Langenberg et al. in view of Krautkremer et al. These rejections are respectfully traversed.

Applicants' independent claim 1 recites a method for controlling a propulsion drive comprising at least one first propeller drive and at least one second propeller drive. The first and second propeller drives are essentially separated from each other. The method comprises controlling the propulsion drive by a single control command whereby a first control signal for controlling the first propeller drive and a second control signal for controlling the second propeller drive are generated from the control command. Independent claim 12 recites an apparatus for controlling a propulsion drive including at least one first propeller drive and at least one second propeller drive. The control device controls the propulsion drive by a single control command. Based on the control command, the control device generates a first control signal by which the first propeller drive is controllable and a second control signal by which the second propulsion drive is controllable. These features

encompass applicants' exemplary embodiment as illustrated in Fig. 2 wherein control commands are given on the bridge 26. The control commands are transferred to the CRP control unit 34 which defines the control signals to be forwarded to different propulsion units. From the CRP control, a control signal is sent to the control unit 36 for azimuth propulsion which defines the rotation speed of the motor 14 driving the propulsion unit and the rotation speed of the propeller 4. Another control signal from the CRP control 34 is sent to the control unit 38 of the main propeller, which based on the control signal defines rotation speed of the propeller 2 and the blade angle of the propeller so that the required propulsion power is generated.

In the Krautkremer patent three distinct command signals are forwarded to the microcomputer to generate control signals to the propeller drives. Propeller drives are controlled by the several control signals. A first potentiometer 12 operated by a lever 15 through the microcomputer 18 changes the thrust strength by adjusting the angular position of the propellers 4 and 5, by changing the speeds of the motors 10 and 11, and/or by changing the pitch of the propeller blades. The second potentiometer 13 operates by a head 16 through the microcomputer 18 and controls rotation-free transverse movement of the watercraft by pivoting the steerable propellers or by changing the speed or pitch of the propeller blades. The third potentiometer 14 is operated by handle 17 through the microcomputer 18 and controls the rotation of the watercraft according to the desired direction and degree of rotation. The three potentiometers 12, 13 and 14 act on the microcomputer 18 which outputs signals to course-dependent control devices 19-24. Course-dependent control devices 19-24 are typically amplifiers with electronic compensating circuits which adjust output signals from microcomputer 18 to a form compatible with the control units of the devices which are being controlled. Thus,

Krautkremer does not disclose, controlling the propulsion drive by a single control command as in Applicants' independent claims 1 and 12.

With respect to the rejection over the Langenberg patent in view of the Krautkremer patent, the Office Action recognizes that the Langenberg patent does not disclose that the propulsion drives are controlled by a single control command whereby a first control signal for controlling the first propeller drive and a second control signal for controlling the second propeller drive are generated from the control command. The Langenberg patent simply does not disclose how commands are issued. Applicants respectfully disagree with the Office Action's assertion that the Krautkremer patent overcomes the deficiencies of the Langenberg patent. As discussed above, the Krautkremer patent discloses three potentiometers for control. Further, Applicants respectfully disagree with the Office Action's assertion that one of ordinary skill would have been motivated to include the control of the Krautkremer patent in the Langenberg patent. The Langenberg patent provides a forward propeller and an aft propeller each driven by means of a separate propulsion system. As stated in the Abstract, the aft propeller is preferably driven by means of a separate drive system. Thus, the Langenberg patent teaches away from the control disclosed in the Krautkremer patent.

The remaining dependent claims are allowable for at least the reasons discussed above as well as for the individual features they recite. For example, dependent claim 3 recites the propellers driven by the first and the second propeller are arranged on the essentially same horizontal level and that the propellers are rotated in the opposite directions. These features are not disclosed by the cited art.

Early and favorable action with respect to this application is respectfully requested.

Should the Examiner have any questions regarding this amendment or the application in general, he is invited to contact the undersigned at the number provided below.

Respectfully submitted,

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